

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number  
**WO 2004/110466 A2**

(51) International Patent Classification<sup>7</sup>: **A61K 35/74**,  
A23L 1/30, C12N 1/20, A61P 1/00

(21) International Application Number:  
PCT/NL2004/000420

(22) International Filing Date: 14 June 2004 (14.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
03076924.4 13 June 2003 (13.06.2003) EP

(71) Applicant (for all designated States except US): N.V. NU-  
TRICIA [NL/NL]; 1ste Stationsstraat 186, NL-2712 HM  
Zoetermeer (NL).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SPEELMANS,  
Gelske [NL/NL]; Opal 15, NL-6708 LW Wagenin-  
gen (NL). VRIESEMA, Adrianus, Johannes, Maria  
[NL/NL]; Fluweelmos 6, NL-3994 KR Houten (NL).  
OOLHORST, Simone, Dinanda, Elbertje [NL/NL];  
Oude Bennekomseweg 7, NL-6706 ER Wageningen (NL).

(74) Agents: VAN WESTENBRUGGE, Andries et al.; Ned-  
erlandsch Octrooibureau, Scheveningseweg 82, P.O. Box  
29720, NL-2502 LS The Hague (NL).

(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,  
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,  
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,  
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,  
ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,  
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

**Published:**

— without international search report and to be republished  
upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guid-  
ance Notes on Codes and Abbreviations" appearing at the begin-  
ning of each regular issue of the PCT Gazette.



**WO 2004/110466 A2**

(54) Title: PEDIOCIN-PRODUCING PEDIOCOCCI

(57) Abstract: There are provided pediocin-producing pediococci that have an enhanced survival property in the small intestine. The pediococci comprise in particular *Pediococcus acidilactici* isolated from human faeces. The pediococci are suitable for use in the gastrointestinal tract of humans to provide a health-promoting action, in particular against infection by multi-resistant pathogens. Also provided herein are compositions incorporating such pediocin-producing pediococci.

BEST AVAILABLE COPY